IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicant(s):	Ephraim Feig
Docket No.:	SOM919990022US1
Serial No.:	09/750,577
Filing Date:	December 29, 2000
Group:	2178
Examiner:	Kyle R. Stork

Title: Latches-Links as Virtual Attachments in Documents

AMENDED APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

Sir:

     Applicant (hereinafter referred to as "Appellant") hereby appeal the final rejection of claims 1-3, 5-7, 16-18, 20-22, 30 and 31 of the above-referenced application.

REAL PARTY IN INTEREST

     The present application is assigned to International Business Machines Corporation, as evidenced by an assignment recorded April 20, 2001 in the U.S. Patent and Trademark Office at Reel 11715, Frame 0033. The assignee, International Business Machines Corporation, is the real party in interest.

RELATED APPEALS AND INTERFERENCES

     There are no known related appeals and interferences.

STATUS OF CLAIMS

Claims 1-3, 5-7, 16-18, 20-22, 30 and 31 are pending in the present application, stand rejected under 35 U.S.C. §103(a), and are appealed. Claims 4, 8-15, 19 and 23-29 have been canceled.

STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates generally to a method and system for managing target files lined to referring documents and, more particularly, to a system and method for viewing, embedding, providing security for, and deleting target files referred to by referring documents (Specification, page 1, lines 4-7).

Independent claim 1 provides a method of managing target documents referred to by referring documents. One or more referring documents are identified in a network. Each of the one or more referring documents is associated with a user on the network and has one or more hypertext links. Each hypertext link points to a target document stored in storage. It is determined when a user deletes one or more referring documents associated with the user. Removal of a target document from storage is enabled when one or more hypertext links pointing to the target document cease to exist.

By way of example, an illustrative embodiment of the invention of claim 1 is shown in FIG. 7A(1) of the drawings. FIG. 7A(1) shows a network operation diagram illustrating the sequence of operational steps carried out by an author client, a user, and a master server computer in deleting target files/referring documents for the storage architectures shown in FIG. 2A(1) and FIG. 2A(2). In step 1000, a user sends a delete request for a referring document to a master server computer 110. The process then flow to step 1002, where master server computer 110 accesses the selected referring document and deletes it. Master server computer 110 sends a message indicating that the referring document for a target document has been deleted. If the author client wants to delete the

target document, the process then flows to step 1022, where a delete request is sent for the target document (Specification, page 53, line 15 through page 55, line 8).

Dependent claim 7 recites the method of claim 1 in which a counter for the target document is decremented when a hypertext link ceases to exist. It is determined whether the count for the counter fo the target document equal zero. If the counter equals zero, a message is set to an author of the target document asking whether the author wants to delete the target document from the storage.

By way of example, an illustrative embodiment of the invention of claim 7 is shown in FIG. 7A(1) of the drawings. FIG. 7A(1) shows a network operation diagram illustrating the sequence of operational steps carried out by an author client, a user, and a master server computer in deleting target files/referring documents for the storage architectures shown in FIG. 2A(1) and FIG. 2A(2). In step 1006, a master server computer 110 determines if the counter for the target document is equal to zero. If the counter for the target document is equal to zero, the process then flows to step 1012, where master server computer 110 sends a message indicating that the referring document has been deleted. In step 1016, master server computer 110 sends a message asking if an author client wants to delete a target document (Specification, page 53, line 15 through page 55, line 8).

Independent claim 16 recites a system for managing target documents referred to by referring documents. The system comprises a storage for storing one or more target documents. The system also comprises a processor coupled to the storage for identifying one or more referring documents in a network. Each of the one or more referring documents is associated with a user of the network and has one or more hypertext links. Each hypertext link points to a target document of the one or more target documents. The processor determines when a user deletes one or more referring documents associated with the user. The storage enables removal of a target document of the one or more target documents when one or more hypertext links pointing to the target document cease to exist.

By way of example, an illustrative embodiment of the invention of claim 16 is shown in FIGS. 2A(1) and 7A(1) of the drawings. FIG. 2A(1) shows a schematic diagram illustrating the storage architecture of a user client computer 100 and a master server computer 110 in a first embodiment of the present invention. Master server computer 110 includes an operating system

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program 80, a latching software 67, a network program 95, and a storage 175 (Specification, page 16, line 15 through page 17, line 23). FIG. 7A(1) shows a network operation diagram illustrating the sequence of operational steps carried out by an author client, a user, and a master server computer in deleting target files/referring documents for the storage architectures shown in FIG. 2A(1) and FIG. 2A(2). In step 1000, a user sends a delete request for a referring document to a master server computer 110. The process then flow to step 1002, where master server computer 110 accesses the selected referring document and deletes it. Master server computer 110 sends a message indicating that the referring document for a target document has been deleted. If the author client wants to delete the target document, the process then flows to step 1022, where a delete request is sent for the target document (Specification, page 53, line 15 through page 55, line 8).

Dependent claim 22 recites the system of claim 16 further comprising means for decrementing a counter for the target document when a hypertext link ceases to exist, and means for determining whether the count for the counter of the target document equals zero. If the counter equals zero, there is means for sending a message to an author of the target document asking whether the author wants to delete the target document from storage.

By way of example, an illustrative embodiment of the invention of claim 22 is shown in FIGS. 2A(1) and 7A(1) of the drawings. FIG. 2A(1) shows a schematic diagram illustrating the storage architecture of a user client computer 100 and a master server computer 110 in a first embodiment of the present invention. Master server computer 110 includes an operating system program 80, a latching software 67, a network program 95, and a storage 175 (Specification, page 16, line 15 through page 17, line 23). FIG. 7A(1) shows a network operation diagram illustrating the sequence of operational steps carried out by an author client, a user, and a master server computer in deleting target files/referring documents for the storage architectures shown in FIG. 2A(1) and FIG. 2A(2). In step 1006, a master server computer 110 determines if the counter for the target document is equal to zero. If the counter for the target document is equal to zero, the process then flows to step 1012, where master server computer 110 sends a message indicating that the referring document has been deleted. In step 1016, master server computer 110 sends a message asking if an author client wants to delete a target document (Specification, page 53, line 15 through page 55, line 8).

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GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

     I. Claims 1-3, 5, 6, 16-18, 20, 21, 30 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over B. Venners, "Java's Garbage-Collected Heap: An Introduction to the Garbage-Collected Heap of the Java Virtual Machine," (hereinafter "Venners") in view of U.S. Patent No. 6,638,314 to Meyerzon et al. (hereinafter "Meyerzon") and A. Birrell et. al., "Distributed Garbage Collection for Network Objects" (hereinafter "Birrell").

     II. Claims 7 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable Venners, Meyerzon, Birrell and U.S. Patent No. 5,806,078 to Hug (hereinafter "Hug").

ARGUMENT

     Appellants incorporate by reference herein the disclosures of all previous responses filed in the present application, namely, responses dated July 8, 2004, April 13, 2005, January 20, 2006 and June 19, 2006. Sections I and II to follow will respectively address grounds I and II presented above.

I. Obviousness rejection of Claims 1-3, 5, 6, 16-18, 20, 21, 30 and 31

     With regard to the rejection of claims 1-3, 5, 6, 16-18, 20, 21, 30 and 31 under 35 U.S.C. §103(a) as being unpatentable over Venners in view of Meyerzon and Birrell, Appellant respectfully asserts that the cited combination fails to establish a prima facie case of obviousness under 35 U.S.C. §103(a), as specified in M.P.E.P. §2143.

     M.P.E.P. §2143 states that three requirements must be met to establish a prima facie case of obviousness. First, there must be some suggestion or motivation to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited combination must teach or suggest all the claim limitations. While it is sufficient to show that a prima facie case of obviousness has not been established by showing that one of the requirements has not been met, Appellant respectfully believes that none of the requirements have been met.

     First, Appellant asserts that no motivation or suggestion exists to combine Venners, Meyerzon and Birrell in a manner proposed by the Examiner, or to modify their teachings to meet

the claim limitations. For at least this reason, a prima facie case of obviousness has not been established.

The Federal Circuit has stated that when patentability turns on the question of obviousness, the obviousness determination "must be based on objective evidence of record" and that "this precedent has been reinforced in myriad decisions, and cannot be dispensed with." In re Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002). Moreover, the Federal Circuit has stated that "conclusory statements" by an examiner fail to adequately address the factual question of motivation, which is material to patentability and cannot be resolved "on subjective belief and unknown authority." Id at 1343-1344.

In the final Office Action, on page 3, paragraph 3, the Examiner provides the following statement to prove motivation to combine Venners and Meyerzon:

> "It would have been obvious ... to have combined Venners's method and Meyerzon's method, since it would have allowed a user to garbage-collect crawled documents."

Appellant submits that the statement above is based on the type of "subjective belief and unknown authority" that the Federal Circuit has indicated provides insufficient support for an obviousness rejection. More specifically, the Examiner fails to identify any objective evidence of record which supports the proposed combination. Meyerzon accomplishes deletion through a count for the number of web crawls, and there exists no motivation to combine Meyerzon with the individual reference counting of Venners in order to achieve garbage collection. Thus, the Examiner's conclusory statements do not adequately address the issue of motivation to combine references.

It is well-settled law that "teachings of references can be combined *only* if there is some suggestion or incentive to do so." *ACS Hosp. Sys. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984) (emphasis in original). Moreover, in order to avoid the improper use of a hindsight-based obviousness analysis, particular findings must be made as to why one skilled in the relevant art, having no knowledge of the claimed invention, would have selected the components disclosed by Venners and Meyerzon in the manner claimed (*See, e.g., In re Kotzab*, 217

F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)). "It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to '[use] that which the inventor taught against its teacher.'" *In re Sang-Su Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002) (quoting *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

Secondly, Appellant asserts that there is no reasonable expectation of success in achieving the present invention through a combination of Venners, Meyerzon and Birrell. For at least this reason, a prima facie case of obviousness has not been established. Appellant does not believe that Venners and Meyerzon are combinable since it is not clear how one would combine them. For example, it is not clear how the garbage detection algorithms for Java objects of Venners may be combined with the document retrieval through and web crawl of Meyerzon. Meyerzon performs deletion through web crawl counts without the need for the individual reference counts of Venners. No guidance was provided in the Office Action as to how the references can be combined to achieve the present invention. However, even if combined, they would not achieve the techniques of the claimed invention.

Lastly, the collective teaching of Venners, Meyerzon and Birrell fails to suggest or to render obvious at least the elements of independent claims 1 and 16 of the present invention. For at least this reason a prima facie case of obviousness has not been established.

Independent claims 1 and 16, recite techniques for managing target documents referred to by referring documents. One or more referring documents in a network are identified. Each of the one or more referring documents are associated with a user on the network and has one or more hypertext links. Each hypertext link points to a target documents stored in a storage. It is determined when a user deletes one or more referring documents associated with the user. When one or more hypertext links pointing to a target documents cease to exist, the target document is enabled to be removed from storage.

Venners discloses methods for garbage detection for Java objects. Meyerzon discloses document retrieval through a web crawl. Birrell discloses a garbage collector designed to support network objects. The Examiner contends that the combination of Venners, Meyerzon and Birrell teaches or suggests all of the limitations of independent claims 1 and 16. Appellant respectfully disagrees.

The combination of Venners, Meyerzon and Birrell fails to disclose identifying one or more referring documents in a network, with each of the one or more referring documents being associated with a user on the network, as well as detecting user deletion of a reference document associated with that user. Venners discloses garbage detection algorithms for Java objects and fails to disclose anything regarding documents in a network associated with users on the network. Meyerzon discloses document retrieval through a web crawl and fails to remedy the deficiencies described above with regard to Venners. Birrell describes garbage collection done over a network but fails to disclose anything relating to referring documents being associated with users on the network and fails to disclose determining when a user deletes one or more referring documents associated with that user. Birrell fails to remedy the deficiencies described above with regard to Venners and Meyerzon. Therefore, the combined teaching of Venners, Meyerzon and Birrell does not result in Appellant's invention as recited in the independent claims and Appellant's invention as recited in the independent claims is not obvious in view of the combined teaching of Venners, Meyerzon and Birrell.

Dependent claims 2, 3, 5, 6, 17, 18, 20, 21, 30 and 31 are patentable at least by virtue of their dependency from independent claims 1 and 16, and also recite patentable subject matter in their own right. Accordingly, withdrawal of the rejection to claims 1-3, 5, 6, 16-18, 20, 21, 30 and 31 under 35 U.S.C. §103(a) is therefore respectfully requested.
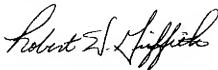
II. Obviousness rejection of Claims 7 and 22

With regard to the rejection of claims 7 and 22 under 35 U.S.C. §103(a) as being unpatentable over Venners in view of Meyerzon, Birrell and Hug, Appellant asserts that the cited combination fails to teach or suggest all of the claim limitations. Hug discloses a system for storing and retrieving changes to spreadsheet and word processor documents and fails to remedy the deficiency described above with regard to independent claims 1 and 16. Appellant asserts that claims 7 and 22 are patentable at least by virtue of their dependency from respective independent claims 1 and 16. Further, dependent claims 7 and 22 contain patentable subject matter in their own right. Therefore, the combined teaching of Venners, Meyerzon, Birrell and Hug does not result in Appellant's invention as recited in the subject claims and Appellant's invention as recited in the

subject claims is not obvious in view of the combined teaching of Venners, Meyerzon, Birrell and Hug. Accordingly, withdrawal of the rejection of claims 7 and 22 under 35 U.S.C. §103(a) is therefore respectfully requested.

In view of the above, Appellants believe that claims 1-3, 5-7, 16-18, 20-22, 30 and 31 are in condition for allowance, and respectfully request withdrawal of the §103(a) rejections.

Respectfully submitted,

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1. A method of managing target documents referred to by referring documents, comprising the steps of:

identifying one or more referring documents in a network, each of the one or more referring documents associated with a user on the network and having one or more hypertext links, each hypertext link pointing to a target document stored in a storage;

determining when a user deletes one or more referring documents associated with the user; and

enabling removal of a target document from the storage when one or more hypertext links pointing to the target document cease to exist.

2. The method of claim 1, wherein the one or more referring documents and the target document are stored in different storage devices coupled over a network.

3. The method of claim 1, wherein the one or more referring documents and the target document are stored in the same storage device.

5. The method of claim 1, further comprising the step of decrementing a counter for the target document when a hypertext link ceases to exist.

6. The method of claim 5, further comprising the step of:

determining whether the count for the counter of the target document equals zero.

7. The method of claim 6, wherein if the counter equals zero, further comprising the step of:

sending a message to an author of the target document asking whether the author wants to delete the target document from the storage.

16. A system for managing target documents referred to by referring documents, comprising:

a storage for storing one or more target documents;

a processor coupled to the storage, for identifying one or more referring documents in a network, each of the one or more referring documents associated with a user of the network and having one or more hypertext links, each hypertext link pointing to a target document of the one or more target documents;

wherein the processor determines user deletes one or more referring documents associated with the user; and

wherein the storage enables removal of a target document of the one or more target documents when one or more hypertext links pointing to the target document cease to exist.

17. The system of claim 16, wherein the one or more referring documents and the target document are stored in different storage devices coupled over a network.

18. The system of claim 16, wherein the one or more referring documents and the target document are stored in the same storage device.

20. The system of claim 16, further comprising means for decrementing a counter for the target document when a hypertext link is ceases to exist.

21. The system of claim 20, further comprising:
means for determining whether the count for the counter of the target document equals zero.

22. The system of claim 6, wherein if the counter equals zero, further comprising:
sending a message to an author of the target document asking whether the author wants to delete the target document from the storage.

30. The method of claim 1, wherein a hypertext link pointing to a target document ceases to exist when the hypertext link is deleted.

31. The method of claim 1, wherein a hypertext link pointing to a target document ceases to exist when a referring document having the hypertext link is deleted.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.